

3/21/2018

Print



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

| PO No | Supplier | Line Item No | Rel No | Terms | Purchased Item | Description | For Part No | Project | Equipment ID | Order Qty | Due Date | Received Quantity | Accounting Job No | Container No | Status | Receive Date | Price/Unit |
|----------|-----------|--------------|--------|--------|---------------------------|--|-------------|---------|--------------|-----------|-----------|-------------------|-------------------|--------------------|--------|--------------|---------------|
| P0039320 | ACI001-VC | 1 | 1 | Net 30 | M304B0.625X3.000 | 304 Bar .625 X 3.00 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft | | | | 12 | 3/21/2018 | 12 | | S053333 | Stock | 3/21/2018 | \$ 29.73 / ft |
| | | 2 | | | D6201P | T Extrusion 4X4X3/8 | | | | 20 | | 20 | | S053642 S053647 | Stock | 3/21/2018 | \$ 23.00 / ft |
| | | 3 | | | MT-A513-T- 0.750W0.085 | A513 Seamless Alloy Steel Round Tubing 0.75"dia. x 0.085" Wall | | | | 40 | | 46 | | S053643 | Stock | 3/21/2018 | \$ 3.60 / ft |
| | | 8 | | | MT-4140QT-R1.125 | AISI 4140 Quenched &Tempered Steel Round Bar 1.125" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT | | | | 20 | | 20 | | S053644 | Stock | 3/21/2018 | \$ 7.75 / ft |
| | | 11 | | | M6061T6B1.000X5.000 | 6061T6 Bar 1.000 X 5.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | | | | 24 | | 24 | | S053645 | Stock | 3/21/2018 | \$ 19.79 / ft |
| | | 17 | | | M303R0.625 | 303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft | | | | 12 | | 12 | | S053646 | Stock | 3/21/2018 | \$ 7.93 / ft |
| Total: | | | | | | | | | | 128 | | 134 | | | | | |

Received Earlier

Astm

Plex 3/21/2018 4:04 PM Dart.Dubois Pascal

3/15/2018

PURCHASE ORDER



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039320

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039320
PO Date: 3/14/18
Due Date: 3/21/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments: quote no. sou0092083 sou0091947

REVISED

E-MAILED

Items

| Line Item | Part | Supplier Part No | Description | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|-----------|---------------------------|------------------|--|--------|----------|----------------|-------------------|---------|------------------|----------------|
| 1 | M304B0.625X3.000 | | 304 Bar .625 X 3.00 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft | Firmed | 3/21/18 | 12 ft | 0 ft | 12 ft | \$29.7275/ft | \$356.73 |
| 2 | D6201P | | T Extrusion 4X4X3/8 | Firmed | 3/21/18 | 20 ft | 0 ft | 20 ft | \$23.00/ft | \$460.00 |
| 3 | MT-A513-T- 0.750W0.085 | | A513 Seamless Alloy Steel Round Tubing 0.75"dia. x 0.085" Wall | Firmed | 3/21/18 | 40 ft | 0 ft | 40 ft | \$3.60/ft | \$144.00 |
| 4 | M304S11GA | | 304/316 0.125 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 | Firmed | 3/21/18 | 64 sf | 0 sf | 64 sf | \$12.2298/sf | \$782.71 |
| 5 | M304S18GA | | 304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 | Firmed | 3/21/18 | 128 sf | 0 sf | 128 sf | \$5.355/sf | \$685.44 |

Line Item Note as per dwg d6201 rev. a
w/o no 174333

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3/15/2018

PURCHASE ORDER

| Items | | | | | | | | | | Unit Price (CAD) | Extended Price |
|-----------|----------------------|------------------|---|--------|----------|----------------|-------------------|---------|--|------------------|-------------------|
| Line Item | Part | Supplier Part No | Description | Status | Due Date | Order Quantity | Received Quantity | Balance | | | |
| 6 | M2024T3S.032 | | 2024-T3 .032 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 | Firmed | 3/21/18 | 48 sf | 0 sf | 48 sf | | \$4.780625/sf | \$229.47 |
| 7 | M2024T3S.040 | | 2024-T3 .040 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 | Firmed | 3/21/18 | 96 sf | 0 sf | 96 sf | | \$5.601875/sf | \$537.78 |
| | | | | | | | 96 | | | MAR 16 2018 | DAS 11 9-89 |
| 8 | MT-4140QT-R1.125 | | AISI 4140 Quenched & Tempered Steel Round Bar 1.125" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT | Firmed | 3/21/18 | 20 ft | 0 ft | 20 ft | | \$7.75/ft | \$155.00 |
| | | | | | | | 20 | | | MAR 21 2018 | DAS 11 9-89 |
| 9 | M1018R0.313 | | 1018-1025 Round Bar .313 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft | Firmed | 3/21/18 | 12 ft | 0 ft | 12 ft | | \$0.2141666/ft | \$2.57 |
| | | | | | | | 12 | | | MAR 19 2018 | DAS 11 9-89 |
| 10 | M6061T6B2.500X01.500 | | 6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | Firmed | 3/21/18 | 24 ft | 0 ft | 24 ft | | \$14.36125/ft | \$344.67 |
| | | | | | | | 24 | | | MAR 19 2018 | DAS 11 9-89 |
| 11 | M6061T6B1.000X5.000 | | 6061T6 Bar 1.000 X 5.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | Firmed | 3/21/18 | 24 ft | 0 ft | 24 ft | | \$19.7925/ft | \$475.02 |
| | | | | | | | 24 | | | MAR 21 2018 | DAS 11 9-89 |

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PURCHASE ORDER

3/15/2018

| | | Items | | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|-----------|----------------------|------------------|--|--------|----------|----------------|-------------------|---------|------------------|----------------|
| Line Item | Part | Supplier Part No | Description | | | | | | | |
| 12 | M6061T6B1.250X03.000 | | 6061T6 Bar 1.250 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | Firmed | 3/21/18 | 12 ft | 0 ft | 12 ft | \$14.361666/ft | \$172.34 |
| | | | | | | 12' | | | MAR 19 2018 | DAS 11 9-89 |
| 13 | M6061T6B1.000X02.000 | | 6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | Firmed | 3/21/18 | 40 ft | 0 ft | 40 ft | \$7.46275/ft | \$298.51 |
| | | | | | | 40' | | | MAR 19 2018 | DAS 9-89 |
| 14 | M6061T6B1.000X06.000 | | 6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft | Firmed | 3/21/18 | 24 ft | 0 ft | 24 ft | \$19.451666/ft | \$466.84 |
| | | | | | | 24' | | | MAR 19 2018 | DAS 11 9-89 |
| 15 | M304R0.375 | | 304 Round Bar 0.375 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft | Firmed | 3/21/18 | 36 ft | 0 ft | 36 ft | \$1.188/ft | \$42.77 |
| | | | | | | 36' | | | MAR 19 2018 | DAS 11 9-89 |
| 16 | M303H0.500 | | 303 Hex Bar .500 : MATERIAL: AISI 303 SS HEX BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft | Firmed | 3/27/18 | 36 ft | 0 ft | 36 ft | \$9.817777/ft | \$353.44 |
| | | | | | | 36' | | | | |
| 17 | M303R0.625 | | 303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft | Firmed | 3/21/18 | 12 ft | 0 ft | 12 ft | \$7.92666/ft | \$95.12 |
| | | | | | | 12' | | | MAR 21 2018 | DAS 11 9-89 |

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3/15/2018

PURCHASE ORDER

| Line Item | | Part | Supplier Part No | Description | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|--------------|--|---------------|------------------|--|--------|----------|----------------|-------------------|---------|------------------|----------------|
| 18 | | M6061T6R1.125 | | 6061 Round Bar 1.125 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft | Firmed | 3/21/18 | 12 ft | 0 ft | 12 ft | \$3.453333/ft | \$41.44 |
| | | | | | | | | | | MAR 19 2018 | DAS 11 9-89 |
| 19 | | M6061T6R0.250 | | 6061-T6 Round Bar 0.250" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft | Firmed | 3/21/18 | 20 ft | 0 ft | 20 ft | \$0.1565/ft | \$3.13 |
| | | | | | | | | | | MAR 19 2018 | DAS 11 9-89 |
| 20 | | M6061T6R1.500 | | 6061-T6 Round Bar 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft | Firmed | 3/21/18 | 20 ft | 0 ft | 20 ft | \$5.521/ft | \$110.42 |
| | | | | | | | | | | MAR 19 2018 | DAS 11 9-89 |
| 21 | | M6061T6R2.000 | | 6061T6 Round Bar 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft | Firmed | 3/21/18 | 20 ft | 0 ft | 20 ft | \$9.8135/ft | \$196.27 |
| | | | | | | | | | | MAR 19 2018 | DAS 11 9-89 |
| Grand Total: | | | | | | | | | | \$5,953.67 | |

Order Notes

CL

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3/15/2018

PURCHASE ORDER

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

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ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

Copy

CO00078782

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Instruction F-M

Att: CHANTAL LAVOIE Tél.: 613-632-5200
Delivery Route 5

Page 1

Customer N° CL10001056
Date 2018/03/15
Delivery date **2018/03/21**
Your order N° 039320
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days

| Product Description | Weight | Qty | U/M | PCS NB | | | Internal Use Only | | | | | |
|--|--------|-------|----------|--------|------|-----|-------------------|---|---|---|-------------|-------------|
| | | | | CMD | EXP | B/O | IN | I | S | C | OUT | |
| 1 TUBE MEC 0.750 OD X .083 NS TME-0750083 10058 2 X 20' R/L HEAT: 15C1472 LINE 3 AC14376-MM-19/03 | 23.64 | 40.00 | PL_\$PI | | 20x2 | | 46' | | | | MAR 21 2018 | DAS 11 9-89 |
| 2 ROUND 4140 HEAT TREAT 1 1/8 NS R4140-118 10251 1 X 20' R/L HEAT: 75065609 LINE 8 AC14377-JG-19/03 | 67.60 | 20.00 | PL_\$CLB | | 20x1 | | 20 | | | | MAR 21 2018 | DAS 11 9-89 |
| 3 FLAT ALU 1 X 5 6061-T6 * FAL-15 2534 2 X 12' HEAT: 18010071A LINE12 AC14372-RV-19/03 | 140.98 | 24.00 | PL_\$CLB | | 20x1 | | 24' | | | | MAR 21 2018 | DAS 11 9-89 |

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

Copy

CO00078782

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CL10001056

Date

2018/03/15

Delivery date

2018/03/21

Your order N°

039320

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Shipped to

, Ontario,

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

2

| Product Description | Weight | Qty | U/M | PCS NB | | | Internal Use Only | | | |
|---|--------|-------|----------|--------|-----|-----|-------------------|---|---|----------------------------------|
| | | | | CMD | EXP | B/O | IN | I | S | C |
| 4 ROUND SS 5/8 303 RANDOM NS RSS-58303-V 8749 1 X 12' R/L HEAT : 6174 LINE 18 AC14377-JG-19/03 | 12.52 | 12.00 | PL_\$CLB | | | | 121 | | | MAR 21 2018 DAS 11 9-89 |

Total Weight (Lbs) : 244.74

NIR : R-109516-6

Conditions :
All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By : Time

Total (\$CAD)

Customer's Signature

Date

Y M D

AARISTM LLC

7953 Washington Woods Dr.,
Dayton, OH 45459
Phone: (937)573-4675 Fax: (702)926-4128

Material Test Report

Date: 4/30/2016 MTR No.: 0000056808

TEST CERTIFICATE ACC TO DIN 50049 3.1 B/EN: 10204: 3.1

Part Number: 87-15955-17

PO Number: 87-15955

Description: A513T5-14; SRA; DOM; Grade=1020; Category=CARBON WELDED; Round; OD=0.750"; ID=0.584"; (WT=0.083"); Deburred; Length=240" to 288"

Product: TUBE

Ends: Deburred

Heat No: 15C1472

Steel Grade: 1020

| DIMENSIONS | | | TOLERANCE | | | QUANTITY | | |
|------------|--------|-------|-----------|--------|-----|---|------------|------------|
| | MM | IN | -VE | +VE | UOM | NUMBER | METER / FT | WEIGHT TON |
| OD | 19.050 | 0.750 | 0.0000 | 0.0050 | IN | 1 | 1,598.371 | 5,244.000 |
| ID | 14.834 | 0.584 | 0.0050 | 0.0000 | IN | | | |
| WT | 2.108 | 0.083 | 0.0000 | 0.0000 | IN | | | |
| | | | | | | 6,098.000 - 7,315.200 MM 240.000 - 288.000 IN | | |

| CHEMICAL ANALYSIS | | | | |
|-------------------|-----|--------|--------|-------------|
| ELEMENTS | UOM | MIN | MAX | MIL PRODUCT |
| Carbon (C) | % | 0.1800 | 0.2300 | 0.1900 |
| Manganese (Mn) | % | 0.3000 | 0.6000 | 0.4300 |
| Silicon (Si) | % | | | 0.170 |
| Aluminum (Al) | % | | | 0.480 |
| Phosphorus (P) | % | | 0.0350 | 0.0120 |
| Sulfur (S) | % | | 0.0350 | 0.0100 |
| Chromium (Cr) | % | | | |
| Nickel (Ni) | % | | | |
| Molybdenum (Mo) | % | | | |
| Vanadium (V) | % | | | |
| Copper (Cu) | % | | | |
| Columbium (Cb) | % | | | |
| Calcium (Ca) | % | | | |
| Titanium (Ti) | % | | | |
| Nitrogen (N) | % | | | |
| Boron (B) | % | | | |
| Zirconium (Zr) | % | | | |
| Antimony (Sb) | % | | | |
| Tin (Sn) | % | | | |

| MECHANICAL PROPERTIES | | | |
|-----------------------|------------|--------------|------------------------|
| | Y.S Psi | U.T.S Psi | % E HARDNESS HRB |
| MIN | 55,000 | 65,000 | 10.00 |
| MAX | | | |
| MILL | 67,630 | 76,010 | 20.00 |
| PROD | | | |

Sample Orientation:
Tensile Spec Type:
Gauge Width (MM):

Remarks:

100% EDDY CURRENT TESTING- E309

PASSED

FLATTENING TEST

2/3% OF OD 1/3% OF OD PASSED

FLARING TEST

15% OF ID PASSED

STRAIGHTNESS

PASSED (1/1000 MM)

Remarks:

Melted In: INDIA

Produced In: INDIA

Product is free of weld repair and has not come in contact with Mercury or any of its components.

We hereby Certify that the material described above conforms to Specification and Purchase Order.

Bill Johnston
Quality Co-ordinator

Any questions, Please email: TestReports@aaris-llc.com

CERTIFICATE OF TEST
CERTIFICAT D'ESSAIS

DART

PO. 14377

Page 01 of 02

Certification Date
19-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
S704941

AC00014377

PART NUMBER/NUMÉRO DE PIÈCE

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
VENDU À: DIVISION SALABERRY DE VALLEYFIELD EXPÉDIEZ DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
1-1/8 RD X 20" R/L Line Total: 68 LB
HEAT: 75065609 ITEM: 506426

Specifications:
ASTM A193 GR B7 16 ASTM A434 GR BC 06 ASME SA193 GR B7

CHEMICAL ANALYSIS

| | | | | | | | |
|------|-------|--------|-------|-------|------|------|------|
| C | MN | P | S | SI | NI | CR | MO |
| 0.41 | 0.87 | 0.0090 | 0.028 | 0.23 | 0.18 | 0.90 | 0.18 |
| CU | SN | AL | V | NB | | | |
| 0.17 | 0.007 | 0.021 | 0.003 | 0.003 | | | |

RCPT: R196179

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

| DESCRIPTION | YLD STR KSI | ULT TEN KSI | %ELONG IN 02 IN | %RED IN AREA | HARDNESS BHN |
|-------------|----------------|----------------|--------------------|-----------------|-----------------|
| | 135.0 | 146.0 | 20.4 | 65.0 | 296 |

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport n'a pas été en contact avec le mercure pendant sa possession. JOANNE DESPRES

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
19-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT
AC00014377

Invoice Number
S704941

PART NUMBER/NUMÉRO DE PIÈCE

| | | | |
|-----------------|--------------------------------------|-------------------|-----------------------------------|
| SOLD TO: | ACIER OUELLETTE INC. | SHIP TO: | ACIER OUELLETTE INC. |
| VENDU À: | DIVISION SALABERRY DE VALLEYFIELD | EXPÉDIÉ À: | DIVISION SALABERRY DE VALLEYFIELD |
| | 935, BOUL. DU HAVRE | | 935, BOUL. DU HAVRE |
| | SALABERRY-DE- VALLEYFIELD QC J6S 5L1 | | SALABERRY-DE- VALLEYFIE QC J6S |

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
1-1/8 RD X 20' R/L
Line Total: 68 LB

HEAT: 75065609 ITEM: 506426
END-QUENCH HARDENABILITY (JOMINY - RC)

| | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 | 18 | 20 |
| 57 | 57 | 57 | 57 | 57 | 57 | 55 | 54 | 53 | 51 | 49 | 47 | 45 | 44 | 43 |
| 24 | 28 | 32 | | | | | | | | | | | | |
| 41 | 39 | 37 | | | | | | | | | | | | |

GRAIN SIZE :5 - 8

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
THERMAL TREATMENT: OK
AUSTENIZE 1650 0.60
QUENCH 0 0.00
TEMPER 1415 0.60
MACRO: OK

WATER

COMMENTS

melted and mfg in usa
reduction ratio 68.5:1

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CO, 78782 DART

CAN ART

ALUMINUM EXTRUSION L.P.

PO, 14372N

Material Test Report

Manifest: 336306

Ticket:

5584121

Our Order: **882700 - 1**

Cust P.O.: 4500858361-RY003

Die: ES63347

Part: 160001273

Alloy Temper: 6061 T6511

Description: 1.000 x 5.000

Print Date: 2/21/18

Chemical Composition

Maximum

| <u>CastNum</u> | <u>Si</u> | <u>Fe</u> | <u>Cu</u> | <u>Mn</u> | <u>Mg</u> | <u>Cr</u> | <u>Zn</u> | <u>Ti</u> | <u>OtherEach</u> | <u>OtherTotal</u> |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------|-------------------|
| <u>18010071A</u> | 0.54 | 0.15 | 0.20 | 0.01 | 0.80 | 0.08 | 0.01 | 0.01 | 0.05 | 0.15 |

Mechanical Properties

Strength ksi

| <u>Sample ID</u> | <u>Cast #</u> | <u>Lot #</u> | <u>Test Date</u> | <u>Ultimate Tensile</u> | <u>Yield 2% offset</u> | <u>Elongation 2" gage length</u> |
|------------------|---------------|--------------|------------------|-------------------------|------------------------|----------------------------------|
| 77485 | 18010071A | A11 | 2/11/18 | 43.07 | 39.64 | 15.3 |

Applicable Specifications: ASTMB221-14 AMS-QQ-A200/8A

Country of Origin: ONTARIO, CANADA

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.


Evan Eng, Quality Assurance Manager

70 + 02
CERTIFICATE OF TEST
CERTIFICAT D'ESSAIS

PART

P0.14377

Page 01 of 02

Certification Date
19-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
S704940

AC00014377
PART NUMBER/NUMÉRO DE PIÈCE
508804

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 303 CF ANN BAR ASTM A582
5/8 RD X 12 R/L Line Total: 14 LB
HEAT: 6174 ITEM: 508804

Specifications:
AMS 5640 TYPE 1 U ASTM A582 M17 SAE AMS 5640U 07

CHEMICAL ANALYSIS

| | | | | | | | |
|------|-------|------|------|------|-------|------|------|
| C | SI | MN | P | S | CR | MO | NI |
| 0.06 | 0.37 | 1.74 | 0.04 | 0.34 | 17.55 | 0.47 | 8.04 |
| CU | N | | | | | | |
| 0.73 | 0.073 | | | | | | |

RCPT: R286325

COUNTRY OF ORIGIN : INDIA

MECHANICAL PROPERTIES

| DESCRIPTION | YLD STR MPa | ULT TEN MPa | %ELONG IN 02 IN | %RED IN AREA | HARDNESS BHN |
|-------------|----------------|----------------|--------------------|-----------------|-----------------|
| | 433.0 | 658.0 | 49.0 | 55.0 | 202 |

MATERIAL IS FREE FROM MERCURY CONTAMINATION

THERMAL TREATMENT: OK

HEAT TREATMENT: MATERIAL SOL. ANNEALED AT 1050 C SOAKING FOR
1 HOUR & WATER QUENCHED

CORROSION: OK

MACRO: OK

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport n'a pas été en contact avec le mercure pendant sa possession. JOANNE DESPRES

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
19-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT
AC00014377

Invoice Number
S704940

PART NUMBER/NUMÉRO DE PIÈCE
508804

| | | | |
|----------|--------------------------------------|------------|-----------------------------------|
| SOLD TO: | ACIER OUELLETTE INC. | SHIP TO: | ACIER OUELLETTE INC. |
| VENDU À: | DIVISION SALABERRY DE VALLEYFIELD | EXPÉDIÉ À: | DIVISION SALABERRY DE VALLEYFIELD |
| | 935, BOUL. DU HAVRE | | 935, BOUL. DU HAVRE |
| | SALABERRY-DE- VALLEYFIELD QC J6S 5L1 | | SALABERRY-DE- VALLEYFIE QC J6S |

Description: 303 CF ANN BAR ASTM A582
5/8 RD X 12' R/L

Line Total: 14 LB

HEAT: 6174 ITEM: 508804

COMMENTS
country of origin: india

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.
The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303RO.625
 DATE: MAR 22 2018

PO / BATCH NO.: 039320/5033646

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12
 QUANTITY INSPECTED: 12
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625
 THICKNESS RECEIVED: 0.625
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|--|--------------------|
| SURFACE DAMAGE | Y <input checked="" type="radio"/> N <input type="radio"/> | |
| CORRECT FINISH | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | |
| CORROSION | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | |
| CORRECT MATERIAL PER M-DRAWING | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | <u>Aston A582</u> |
| CORRECT THICKNESS | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | |
| PHOTO REQUIRED | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| CORRECT REF # TO LINK CERT | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | <u>Heat # 6174</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input type="radio"/> N <input checked="" type="radio"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS 11</u> DATE: <u>9-MAR 22 2018</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

ASTM A582

PART NUMBER:

M303R0.D.DDD

DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 0.75" ROUND BAR = M303R0.750

RELEASED
2010-02-02
NPD

| | | | |
|------------|-------------------------------------|----|----------|
| B | REFORMAT DING. ADD SPECS (ZN D8-1). | CP | 10 01 05 |
| A | NEW ISSUE | DS | 01 12 20 |
| REV | DESCRIPTION | BY | DATE |
| DESIGN | | | |
| DRAWN | | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 10.01.05 | | |

| | |
|-----------------------------|--------------|
| DART AEROSPACE LTD | |
| HAWKESBURY, ONTARIO, CANADA | |
| DRAWING NO | REV. B |
| M303R | |
| TITLE | SHEET 1 OF 1 |
| 303 ROUND BAR | SCALE |
| | NTS |

CONVERTED FROM BY DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
10-01-05 10:01 AM
10-01-05 10:01 AM

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 1606146 B1.000x5.000 PO / BATCH NO.: 039320/5053645
 DATE: MAR 22 2018

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000
 THICKNESS RECEIVED: 1.000
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|-----------------------|-------------------------|
| SURFACE DAMAGE | Y (N) | |
| CORRECT FINISH | (Y) N | |
| CORROSION | Y (N) | |
| CORRECT GRAIN DIRECTION | (Y) N | |
| CORRECT MATERIAL PER M-DRAWING | (Y) N | <u>Astm B221</u> |
| CORRECT THICKNESS | (Y) N | |
| PHOTO REQUIRED | Y (N) | |
| CORRECT REF # TO LINK CERT | (Y) N | <u>Part # 18010071A</u> |
| CORRECT MATERIAL IDENTIFICATION | (Y) N | |
| CORRECT M# ON THE MATERIAL | (Y) N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y (N) | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y (N) | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|-----------------------------------|
| INSPECTED BY: <u>DAS</u> <u>11</u> DATE: <u>9-8 MAR 22 2018</u> | SIGNED OFF BY: _____ DATE: _____ | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B21

PART NUMBER: M6061T6B | T TTT | X | WWW.WWW |
THICK | WIDTH

WHERE "T, TTT" = THICKNESS IN INCHES
"WWW WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
R 2009-09-03
MAD

| | | | |
|--|--|----|----------|
| B | REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N D7-1) | CP | 09 07 13 |
| A | NEW ISSUE | DS | 01 08 08 |
| REV | DESCRIPTION | BY | DATE |
| DESIGN | DS | | |
| DRAWN | | | |
| CHECKED | DS | | |
| MFG APPR. | DS | | |
| APPROVED | DS | | |
| DE APPR. | DS | | |
| DATE | 09.07.13 | | |
| DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | | | |
| DRAWING NO M6061T6B | | | |
| TITLE 6061-T6 BAR | | | |
| REV. B SHEET 1 OF 1 | | | |
| SCALE NTS | | | |
| DATE 09.07.13 | | | |
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-A513-T-0.7xw0.085 PO / BATCH NO: 039320/5053643
 DATE: MAR 22 2018

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 46'
 QUANTITY INSPECTED: 46'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W0.085
 THICKNESS RECEIVED: W0.085
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|-----------------------|----------------|
| SURFACE DAMAGE | Y (N) | |
| CORRECT FINISH | (Y) N | |
| CORROSION | Y (N) | |
| CORRECT GRAIN DIRECTION | (Y) N | |
| CORRECT MATERIAL PER M-DRAWING | (Y) N | 4513 type 5 |
| CORRECT THICKNESS | (Y) N | |
| PHOTO REQUIRED | Y (N) | |
| CORRECT REF # TO LINK CERT | (Y) N | Heat # 15C1472 |
| CORRECT MATERIAL IDENTIFICATION | (Y) N | |
| CORRECT M# ON THE MATERIAL | (Y) N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y (N) | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y (N) | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| TYPE OF MATERIAL | HRC | HRB | DUR A | DUR D | WEBSTER |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| | | | |
|-------------------------------|----------------------|--|--|
| QC 18 INSPECTION | | ENGINEERING SIGNOFF (if required) | |
| INSPECTED BY: <u>DAS 11</u> | SIGNED OFF BY: _____ | | |
| DATE: <u>9-89 MAR 22 2018</u> | DATE: _____ | | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ASTM A513 TYPE 5 (1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION: ASTM A513 TYPE 5

PART NUMBER: MT-A513-T-[D.DDD]WT.[TTT]

WHERE D.DDD IS OUTSIDE DIAMETER IN INCHES

WHERE T.TTT IS WALL THICKNESS IN INCHES

EG. 3/4" ROUND TUBING WITH .120" WALL THICKNESS = MT-A513-T-0.750W0.120

| REV | DESCRIPTION | ECN # | DATE | BY | APPROVED |
|-----|--------------------------------|--------|----------|----|----------|
| A | NEW RELEASE | 17-655 | 17.09.08 | VM | VM |
| B | TYPE 5 ADDED, TEMPLATE UPDATED | 17-760 | 17.12.13 | VM | ML |



TITLE: ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING (DOM)

PART NO: MT-A513-T

REV: B

TOOL NO:

INITIALS AND DATE

DESIGNED BY: VM 17/12/13

DRAWN BY: VM 12/13/2017

CHECKED BY: ML 12/20/2017

APPROVED BY: ML 12/20/2017

SCALE: N/A

SHEET 1 OF 1

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-A513-T-1.125W0.188 PO / BATCH NO.: 039300/5053688
 DATE: MAR 22 2018

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 21'
 QUANTITY INSPECTED: 21'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W0.188
 THICKNESS RECEIVED: W0.188
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|-----------------------|-----------------------|
| SURFACE DAMAGE | Y (N) | |
| CORRECT FINISH | (Y) N | |
| CORROSION | Y (N) | |
| CORRECT GRAIN DIRECTION | (Y) N | |
| CORRECT MATERIAL PER M-DRAWING | (Y) N | <u>As per A513 T5</u> |
| CORRECT THICKNESS | (Y) N | |
| PHOTO REQUIRED | Y (N) | |
| CORRECT REF # TO LINK CERT | (Y) N | <u>Heat # C357969</u> |
| CORRECT MATERIAL IDENTIFICATION | (Y) N | |
| CORRECT M# ON THE MATERIAL | (Y) N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y (N) | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y (N) | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS</u> <u>11</u> DATE: <u>9-89</u> <u>MAR 22 2018</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ASTM A513 TYPE 5 (1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION: ASTM A513 TYPE 5

PART NUMBER: MT-A513-T-[D.DDD]WT.[TTT]

WHERE D.DDD IS OUTSIDE DIAMETER IN INCHES

WHERE T.TTT IS WALL THICKNESS IN INCHES

EG. 3/4" ROUND TUBING WITH .120" WALL THICKNESS = MT-A513-T-0.750W0.120

| REV. | DESCRIPTION | ECN # | DATE | BY | APPROVED |
|------|--------------------------------|--------|----------|----|----------|
| A | NEW RELEASE | 17-055 | 17-09-06 | VM | VM |
| B | TYPE 5 ADDED, TEMPLATE UPDATED | 17-790 | 17-12-13 | VM | ML |

| | |
|---|--------------|
| DART AEROSPACE Hawkebury, Ontario, Canada | |
| TITLE ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING (DOM) | |
| PART NO. MT-A513-T | REV. B |
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS ARE TO BE MAINTAINED AFTER FINISHING | |
| DESIGNED BY: VM 17/12/13 | TOO FRANCES |
| CHECKED BY: VM 12/13/2017 | ANGLES |
| APPROVED BY: ML 12/20/2017 | ROUNDS |
| SCALE: 1:1 | SCALE: 1:1 |
| APPROVED BY: ML 12/20/2017 | SHEET 1 OF 1 |
| COPYRIGHT © 2017 BY DART AEROSPACE LTD. | |
| THIS DOCUMENT IS REVISED AND CORRECTED ON THE BASIS OF THE COMMENTS RECEIVED FROM THE CUSTOMER. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO MAINTAIN THE LATEST VERSION OF THIS DOCUMENT. | |

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140QT-R1.125
 DATE: MAR 22 2018

PO / BATCH NO.: 039320/5053644

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 20'
 QUANTITY INSPECTED: 20'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.125
 THICKNESS RECEIVED: 1.125
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|-----------------------|------------------------------------|
| SURFACE DAMAGE | Y (N) | |
| CORRECT FINISH | (Y) N | |
| CORROSION | Y (N) | |
| CORRECT GRAIN DIRECTION | (Y) N | |
| CORRECT MATERIAL PER M-DRAWING | (Y) N | not use with Dert tooling only PD. |
| CORRECT THICKNESS | (Y) N | |
| PHOTO REQUIRED | Y (N) | |
| CORRECT REF # TO LINK CERT | (Y) N | Heat # 75065609 |
| CORRECT MATERIAL IDENTIFICATION | (Y) N | |
| CORRECT M# ON THE MATERIAL | (Y) N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y (N) | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y (N) | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS 11 / PD</u> DATE: <u>9-89 MAR 22 2018</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 ROUND BAR
MINIMUM ROCKWELL C = 20 Rc
MAXIMUM ROCKWELL C = 38 Rc

SPECIFICATION: ASTM A29, AMS 6349, AMS 6382, AMS 6529

PART NUMBER: MT-4140-R-D.DDD
WHERE "D.DDD" = DIAMETER IN INCHES
EX. 4" ROUND BAR = MT-4140-R-4.000

| REV. | DESCRIPTION | ECN # | DATE | BY | APPROVED |
|------|-------------|--------|----------|----|----------|
| A | NEW ISSUE | 17-780 | 17.12.13 | VM | ML |

| | | | |
|--|-------------------|---------------------------|--|
| DART AEROSPACE | | Hamilton, Ontario, Canada | |
| TITLE AISI 4140 ROUND BAR | | | |
| PART NO. | REV. | A | |
| TOOL NO. | | MT-4140-R | |
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS ARE TO BE HOLE DIMENSIONS DIMENSIONS APPLY AFTER FINISHING | | | |
| DESIGNED BY: | INITIALS AND DATE | TOLERANCES: | |
| VM 17/12/13 | | FRACTIONS ± 1/8 | |
| VM 12/13/2017 | | DECIMALS ± .005 | |
| CHECKED BY: | | FINISHES | |
| ML 12/19/2017 | | X .1 | |
| INFO REVIEW BY: | | SURFACE | |
| DP 12/20/2017 | | X .1 | |
| APPROVED BY: | | ROUGHNESS | |
| ML 12/20/2017 | | SCALE: NTS | |
| | | SHEET 1 OF 1 | |
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